AMENDMENTS TO THE CLAIMS

1.   (ORIGINAL) A method in an integrated network switch, the method comprising:

determining an application state for a prescribed network application from a received layer 2 data packet; and

selectively deleting an address entry from a network switch address table that specifies at least one of a source of the received layer 2 data packet and a destination of the layer 2 data packet, based on the determined application state.

2.   (ORIGINAL) The method of claim 1, further comprising storing within a network switch port having received the received layer 2 data packet a plurality of templates configured for identifying the application state from respective available application states of the prescribed network application.

3.   (ORIGINAL) The method of claim 2, wherein the storing step includes storing the plurality of templates in response to the network switch port identifying an initial one of the available application states from the received layer 2 data packet.

4.   (ORIGINAL) The method of claim 3, further comprising deleting the address entry from the network switch address table, following an application-specific aging interval determined by, and initiated in response to, detection of one of the available application states, based on a determined inactivity of the address entry during the application-specific aging interval.

5.   (ORIGINAL) The method of claim 1, wherein the selectively deleting step includes deleting the address entry based on the determined application state specifying an end of a session for the prescribed network application.

6.   (ORIGINAL) The method of claim 5, wherein the detecting step includes:

comparing selected portions of the received layer 2 data packet to a plurality of min terms, that specify frame data used to identify the end of the session for the prescribed network application, during reception of the received layer 2 data packet;

determining whether the selected portions of the received layer 2 data packet match the respective min terms; and

generating a comparison result based on the determining step.

7.   (ORIGINAL) The method of claim 1, wherein the determining step includes determining the application state for the prescribed network application from a plurality of available prescribed network applications, based on simultaneously comparing the received layer 2 data packet to multiple templates that specify frame data used to identify the respective available prescribed network applications.

8.   (ORIGINAL) The method of claim 1, further comprising:

initiating an application-specific aging timer configured for counting an application-specific aging interval for the address entry in response to determining the application state; and

deleting the address entry if the address entry is not accessed upon expiration of the application-specific aging interval.

9.   (ORIGINAL) The method of claim 8, further comprising re.setting the application-specific aging timer in response to detecting and access of the address entry during the application-specific aging interval.

10.   (CURRENTLY AMENDED) A network switch, comprising:

network switch ports, each including a packet classifier configured for determining an application state for a detected one of a plurality of [[a]] prescribed network applications from a received layer 2 data packet; and

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switching logic configured for selectively deleting an address entry that specifies at least one of a source of the received layer 2 data packet and a destination of the layer 2 data packet, based on one of the determined application state and a determined inactivity of the address entry during an application-specific aging interval based on the detected one prescribed network application.

11.   (ORIGINAL) The switch of claim 10, wherein the switching logic includes a programmable timer configured for initiating counting of the application-specific aging interval for the address entry in response to detection of the application state from the received layer 2 data packet.

12.   (ORIGINAL) The switch of claim 10, wherein the switching logic includes a second programmable timer configured for counting a second application-specific aging interval for a second address entry.

13.   (ORIGINAL) The switch of claim 12, further comprising a network switch address table configured for storing the address entry for the received layer 2 data packet and the second address entry.